AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims indicating the current status of each claim and including amendments currently entered as highlighted.

1-44. (Canceled)

45. (New) A method for forming particulate matter of carboxylic cationites, the method comprising the steps of:

(a) dissolving a monovinyl monomer and a cross-linking agent as co-monomers in a solvent containing acetic acid, to form a mixture;

(b) adding an initiator of radical polymerization to said first mixture to form a pre-polymer;

(c) dispersing said pre-polymer in a solution of alcohol, in a first dispersing stage, to form a first dispersion mixture; and

(d) mixing said first dispersion mixture with an aqueous solution of an inorganic salt, in a second dispersing stage, to form a second dispersion mixture, so as to complete polymerization of the particulate matter of carboxylic cationites.

46. (New) The method of claim 45, wherein an amount of said monovinyl monomer and an amount of said cross-linking agent are together in a range of from about 20 percent to about 30 percent weight per weight of said first mixture.

47. (New) The method of claim 45, wherein said solvent includes an aqueous solution of acetic acid.

48. (New) The method of claim 47, wherein said aqueous solution of acetic acid includes an amount of acetic acid in a range of from about 5 percent to about 15 percent volume per volume.

49. (New) The method of claim 47, wherein said aqueous solution of acetic acid includes an amount of acetic acid in a range of from about 60 percent to about 100 percent volume per volume.

50. (New) The method of claim 45, wherein said solvent includes an organic solvent.

51. (New) The method of claim 50, wherein said organic solvent is selected from the group consisting of dimethylformamide, monobutyl glycolate and polyethylene glycol.

52. (New) The method of claim 45, wherein said alcohol is selected from the group consisting of butyl alcohol, octyl alcohol and decyl alcohol.

53. (New) The method of claim 52, wherein a ratio of said pre-polymer to said alcohol is in a range of from about 2.5:1 to about 5:1.

54. (New) The method of claim 52, wherein a ratio of said pre-polymer to said alcohol is about 1:1.

55. (New) The method of claim 45, wherein a ratio of said first dispersion mixture to said aqueous solution of said inorganic salt is in a range of from about 1:4 to about 1:5.

56. (New) The method of claim 55, wherein said aqueous solution of said inorganic salt is an aqueous solution of sodium sulfate.

57. (New) The method of claim 56, wherein an amount of said sodium sulfate in said aqueous solution of sodium sulfate is about 20 percent weight per weight.

58. (New) The method of claim 45, wherein said monovinyl monomer is selected from the group consisting of a methacrylic acid, an acrylic acid and a methacryloylaminocarbonic acid.

59. (New) The method of claim 45, wherein said monovinyl monomer is selected from the group consisting of methacryloylcaproic acid, methacryloylaminobenzoic acid, and methacryloylglycine.

60. (New) The method of claim 45, wherein said cross-linking agent is a long chain cross-linking agent.

61. (New) The method of claim 45, wherein said long chain cross-linking agent is selected from the group consisting of hexahydro-1,3,5 -triacryloyltriazine (HTA), N,N'-methylenediacrylamide (MDAA), N,N'-ethylenedimethacrylamide (EDMA), N,N'-hexamethylenedimethacrylamide (HMDMA), triallylisocyanurate (TAIC), *p*-phenylenedimethacrylamide (*p*-PHDMA), and benzidinedimethacrylamide (BDMA).

62. (New) The method of claim 60, wherein said long chain cross-linking agent is selected from the group consisting of HTA, EDMA, and TAIC.

63. (New) The method of claim 45, wherein said initiator is selected from the group consisting of ammonium persulfate, a 1,1' azobis (cyclohexanecarbonitrile), and a combination of ammonium persulfate - sodium methabisulfite.

64. (New) The method of claim 45, wherein said alcohol includes butyl alcohol.

65. (New) The method of claim 45, wherein said alcohol includes octyl alcohol.

66. (New) The method of claim 45, wherein said alcohol includes decyl alcohol.

67. (New) The method of claim 45, wherein said alcohol includes layrilic alcohol.